

Apuleiicola Nov 4. 1838

Dear Sir

I found last week in a pond near this city a plant which I thought might prove to be a new species of *Thalia* but after a close examination find it differ from the characters of that genus & even from both the Orders, *Marsipposida* & *Zingiberaceae* in the remarkable hooked embryo

I have not now any specimens of *Thalia deltoidea* with which to compare this plant but Elliott of course in his detailed description makes no allusion to the embryo from a remark in *Plant. Lindhem.* I judge the embryo to be straight - It is no easy matter to describe the corolla intelligibly & I have sketched it in my rough way on the first page with explanations - I call the six exterior leaves petals because they are exterior & Elliott although he takes a different view of the parts seems to describe the same anagrams

There is no mealy on any part of this plant but the nodes of the panicle & the two glume-like leaves of the spathe are hairy otherwise smooth & shining - It grows 6-10" high the lanceolate leaves (1 1/2 lines) on long terete petioles dilated & sheathing the lower portion of the stem the upper portion very straight & terete like the leaf-stalks The panicle consists of a few diverging branches bearing the flowers at the drooping extremities in a zigzag spike The root is fibrous no rhizome nor tuber - There is nothing aromatic about ~~the~~ any part except that the flowers are fragrant slightly I would like to get your opinion of this and if it should prove to be something new would suggest that it take the name of "*Ravenelia*" But my knowledge of these Orders is so limited that it may easily fall into some Genus of which I know nothing

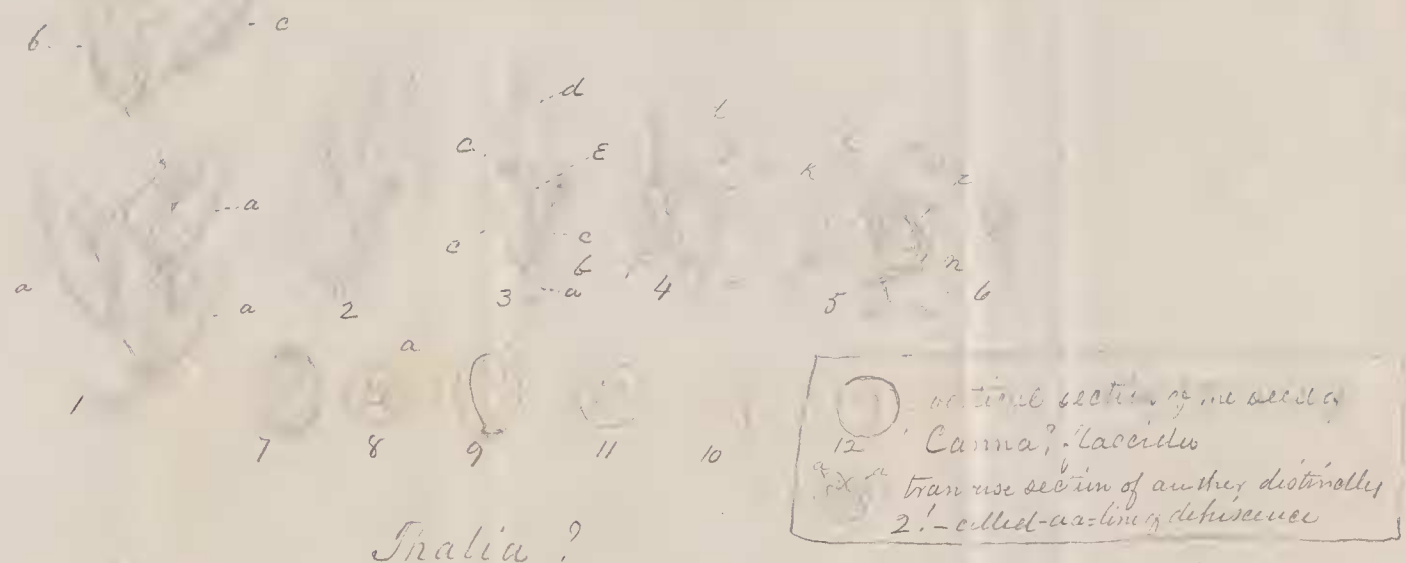
Some two years ago having a day or two in Boston I ran over to see you but unfortunately found you ~~absent~~ from home - Possibly I may see you next summer or the next fall when I hope to have the Southern Manual completed - I sent a package of inquiries of some oddities two years ago to Dr Toney since then I have not heard from him Has he abandoned Botany? And what is to become of the Flora? Do you intend to go on with it?

I enclose two or three nuts of the plant for your examination

And remain

Yours sincerely

A. W. Chapman



Frutia?

- 1 = a branch of <sup>the</sup> (drooping) panicle the rachis zigzag - a a a the 2 unequal spathes enclosing the fruit - b an expanded flower two together in each pair of spathes - c = unexpanded flower
- 2 = a spathe with its two lobes enlarged
- 3 = same the spathe removed & the other flower removed - a ovary - b = 2 of the minute calyx lobes - c = the 3 exterior leaves of the perianth d one of the interior petals - e = another interior petal which is thick & rigid except the recurved summit
- 4 = same the exterior petals removed & lettered as no 3 - f = one of the stamens bearing two bristles hollow & in the bud enfolding the style & stigma - g = the tip of another
- 5 = same the longer petal (d) removed & the other (e) vertically halved & the front portion removed (letters corresponding with the last) h = an another-looking yellow hard body - k = the true <sup>1-called</sup> anther - g the stamens back of it - these three are united below & to margin of the petal (e) n = the style which was at first enclosed in f, but has now by an elastic jerk swung round spirally with its stigma resting on the fold or pouch (o) This fold is adherent to the inner side of the petal e & to the side of the anther-like body h s = the membranous recurved prolongation of the stigma
- 6 = a reversed view of the stamens f with its 2 setae
- 7 = a seed the loose covering removed
- 8 = end view of the same showing the 2-lobed aril (a)
- 9 = vertical section of same showing the curved embryo!! in the midst of hard but somewhat floury albumen the radicle resting on the hilum
- 10 = Embryo removed
- 11 = Transverse section of the seed each lobe of the embryo with a pair of open tubes

1 - vertical section of the seed of  
 12 - Canna? - Laccidus  
 9 - transverse section of anther distinctly  
 2 - called - as - line of dehiscence

When a second petal (like d) is present it is inserted on the back of h fig 5